

## AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions and listings of claims in the application:

### Listing of Claims:

1. (Currently Amended) Configurable diffractive optical element comprising an array of diffractive sub-elements having a reflective surface, wherein each sub-element has a controllable position with a chosen range, and in which a number of sub-elements are provided with a reflective grating with a number of chosen spectral characteristics wherein the position of each sub-element is adjustable in a direction parallel to the element surface.
2. (Currently Amended) Diffractive optical element according to claim 1 wherein the physical size of the sub-element being provided with a diffractive grating is substantially larger than the typical spatial period of the diffractive grating on said sub-element.
3. (Original) Diffractive optical element according to claim 1 wherein the position of each sub-element is adjustable in a direction perpendicular to the element surface.

4. Cancelled.
5. (Original) Diffractive optical element according to claim 1 wherein the position of each sub-element is adjustable in a direction parallel to the optical axis of the incoming or reflected light beam.
6. (Currently Amended) Diffractive optical element according to claim 1 wherein the gratings on the sub-elements being provided with a ~~diffractive~~ grating is a diffractive grating, which constitutes a diffractive lens.
7. (Original) Diffractive optical element according to claim 1 wherein the array of sub-elements is a two-dimensional array.
8. (New) Configurable diffractive optical element comprising an array of diffractive sub-elements having a reflective surface, wherein each sub-element has a controllable position with a chosen range, and in which a number of sub-elements are provided with a grating with a number of chosen spectral characteristics wherein the array of sub-elements is a two-dimensional array.
9. (New) Diffractive optical element according to claim 8 wherein the physical size of the sub-element being provided with a grating is substantially larger than the typical spatial period of the grating on said sub-element.

10. (New) Diffractive optical element according to claim 8 wherein the position of each sub-element is adjustable in a direction perpendicular to the element surface.
11. (New) Diffractive optical element according to claim 8 wherein the position of each sub-element is adjustable in a direction parallel to the element surface.
12. (New) Diffractive optical element according to claim 8 wherein the position of each sub-element is adjustable in a direction parallel to the optical axis of the incoming or reflected light beam.
13. (New) Diffractive optical element according to claim 8 wherein the gratings on the sub-elements being provided with a grating is a diffractive grating, which constitutes a diffractive lens.
14. (New) Configurable diffractive optical element comprising an array of diffractive sub-elements having a reflective surface, wherein each sub-element has a controllable position with a chosen range, and in which a number of sub-elements are provided with a grating with a number of chosen spectral characteristics wherein the gratings on the sub-elements being provided with a grating is a diffractive grating, which constitutes a diffractive lens.

15. (New) Diffractive optical element according to claim 14 wherein the physical size of the sub-element being provided with a grating is substantially larger than the typical spatial period of the grating on said sub-element
16. (New) Diffractive optical element according to claim 14 wherein the position of each sub-element is adjustable in a direction perpendicular to the element surface.
17. (New) Diffractive optical element according to claim 14 wherein the position of each sub-element is adjustable in a direction parallel to the element surface.
18. (New) Diffractive optical element according to claim 14 wherein the position of each sub-element is adjustable in a direction parallel to the optical axis of the incoming or reflected light beam.
19. (New) Diffractive optical element according to claim 14 wherein the array of sub-elements is a two-dimensional array.
20. (New) Configurable diffractive optical element comprising an array of diffractive sub-elements having a reflective surface, wherein each sub-element has a controllable position with a chosen range, and in which a number of sub-

elements are provided with a grating with a number of chosen spectral characteristics, wherein said sub-elements have a curved shape constituting a focusing filter.

21. (New) Diffractive optical element according to claim 20 wherein the sub-elements are shaped as Fresnel zone plates corresponding to a chosen focal length.